DOCUMENT RESUME

ED 056 139 UD 011 862

TITLE A Summary of the Assessments of the District's Integration Programs, 1964-1971. Research Report Series 1971-72, Number 9.
INSTITUTION Sacramento City Unified School District, Calif.
PUB DATE 28 Sep 71
NOTE 20p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Academic Achievement; Defacto Segregation; Discipline Problems; Elementary Schools; Federal Programs; *Integration Effects; Junior High Schools; *Minority Groups; *School Integration; *Spanish Speaking
IDENTIFIERS California; Elementary Secondary Education Title I Program; ESEA Title I Programs; Project Aspiration; Sacramento City Unified School District

ABSTRACT

This research report contains a summary of the evaluation findings obtained from 1964 through the Spring of 1971 concerning both junior high school and elementary programs designed to alleviate or reduce the effects of de facto segregation in the elementary segment. This plan, known as Project Aspiration, was inaugurated during the 1966-67 school year under funding from the Elementary and Secondary Education Act Title I. Evaluation of the effects of this project has continued to the present day. The findings show that minority students in integrated schools tend to perform better academically than their peers; middle-class students are not adversely affected; discipline problems decreased; and, parents and teachers indicated positive results from integration. (Author/JW)

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
ADMINISTRATION BUILDING
1619 N STREET, P.O. BOX 2271
SACRAMENTO, CALIFORNIA 95810
TELEPHONE 444-6060

ALBERT J. SESSAREGO
Superintendent

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED056139

September 28, 1971

Research Report No. 9
Series 1971-72
Topic: A SUMMARY OF THE ASSESSMENTS OF THE DISTRICT'S INTEGRATION PROGRAMS, 1964-1971

INTRODUCTION

Recently a number of requests have been received by the Research and Development Services Office for information concerning the Sacramento City Unified School District's integration programs. This research report contains a summary of the evaluation findings obtained from 1964 through the spring of 1971 concerning both junior high school and elementary programs designed to alleviate or reduce the effects of de facto segregation in the Sacramento City Unified School District.

REASSIGNMENT OF JUNIOR HIGH SCHOOL PUPILS

Following the destruction in August of 1963 of the Stanford Junior High School by a fire of incendiary origin certain groups in the community appeared before the school board and charged that the Stanford school was a de facto segregated school. A suit was filed in Superior Court to prohibit the reconstruction of the school and the moving of portable classrooms onto the Stanford Junior High School site. The court did not prohibit the temporary location of the portable classrooms but required that a plan be evolved by September, 1964, to eliminate racial imbalance at the school. In 1964-65, the total population of this school was reassigned to other junior high schools in the district. When a decision was made to abandon the Stanford Junior High School site, it was decided that a follow-up study should be conducted to see if changes were effected in the scholastic status of the pupils after they were dispersed. These findings were published in January of 1967 in Research Report No. 7, Series 1966-67. The pupils involved in this study were those who had been in the 7th and 8th grades respectively at Stanford Junior High School in the preceding year. The following summary from that report discusses the results of the first year's evaluation of Project Aspiration.

> "Both groups of pupils were matched with non-Stanford pupils on the basis of ethnic characteristics, sex, age, ability test scores, and reading achievement test scores. Test results for the matched-pairs were compared to see if these pupils outgained their matched-peers after leaving Stanford Junior High School. The 8th grade Stanford pupils (one year at other junior high schools) virtually matched the gains of their peers in ability and mathematics, but they did not equal the gains of the matched-pairs in reading and writing achievement -- particularly in reading. The 7th grade Stanford pupils (two years at other junior high schools) virtually equaled the gains of their peers in ability, writing and mathematics, but they reversed the findings of the previous comparison by significantly outgaining their matched-pairs in reading achievement.
>
> "The 7th grade Stanford pupils were also studied in terms of their rates of school attendance and their semester grade point averages before and

UD011862

after leaving Stanford Junior High School. Their average rates of attendance were relatively satisfactory while at Stanford Junior High School (approximately 90 percent). These average rates did not change after their transfer to any significant degree despite the longer distances most of these pupils had to travel to their new junior high schools. The semester grade point averages of these pupils increased significantly immediately after leaving Stanford and remained at improved levels until they were promoted from the junior high school segment."

Reassignment of Elementary Pupils (Project Aspiration)

Since 1966 the Sacramento City Unified School District has reassigned a number of pupils from elementary schools which were de facto segregated by board definition (more than one half of the pupils were from a single ethnic minority) to other elementary schools with low minority populations. The balance of this report reviews the evaluation findings concerning these reassigned pupils and contains a number of terms unique to the programs described. Following is a list of these terms together with their definitions:

A. "Sending schools" -- those de facto segregated schools which had all or portions of their attendance areas reassigned to schools with small minority group populations. These schools were also designated as follows:

1. "Discontinued sending schools" -- the sending schools which were no longer to continue as elementary schools.

   a. The American Legion Elementary School

   b. The Argonaut Elementary School

   c. The Washington Elementary School

2. "Remaining sending schools" -- the sending schools which had only portions of their attendance areas reassigned to other schools and which will continue as neighborhood elementary schools.

   a. The Camellia Elementary School

   b. The Donner Elementary School

   c. The Elder Creek Elementary School

   These schools are also target schools receiving Title I services.

B. "Receiving schools" -- those schools with small minority group populations to which attendance areas of sending schools were reassigned.

C. "Integrated project pupils" -- those pupils residing in the attendance areas reassigned from the sending schools to the receiving schools.

D. "Non-integrated project pupils" -- those pupils residing in the attendance areas still assigned to the remaining sending schools.

E. "Resident pupils" -- those pupils residing in the original attendance areas of the receiving schools.

Project Aspiration - 1966-67

At its regular meeting on April 25, 1966, the Board of Education of the Sacramento City Unified School District adopted a plan of action for the alleviation or the elimination of the adverse effects of de facto segregation in the elementary schools of the Sacramento City Unified School District. This plan called for the closing during the 1966-67 school year of one de facto segregated elementary school "American Legion" and the reassignment of portions of the student population from four other de facto segregated schools. Pupils were reassigned to 19 receiving schools which had small minority group populations. Because of the increased distances pupils would have to travel to and from school, the following special services were provided:

A. Bus transportation was provided for those integrated project pupils who were transferred to receiving schools which were beyond reasonable walking distances from their homes.

B. A free lunch program was available for pupils in financial need.

In addition to the special services listed above, all of the reassigned pupils were to receive the following extra assistance: (1) study trips; (2) audiometric services; (3) after school study centers; and (4) in-service training for their teachers in dealing with compensatory pupils.

The following schools were involved during the first year of Project Aspiration:

"a. 'Sending schools' -- those five de facto segregated schools which had all or portions of their attendance areas reassigned to schools with small minority group populations. These five schools are also classified as follows:

(1) 'discontinued sending schools' -- the two sending schools which were no longer to continue as elementary schools.

(a) American Legion School

(b) Argonaut School

(2) 'remaining sending schools' -- the three sending schools which had only portions of their attendance areas reassigned to 'receiving schools' and which will continue as neighborhood, compensatory elementary schools. (A map showing the location of each school mentioned in this report is included in the appendix.)

(a) Camellia Elementary School

(b) Donner Elementary School

(c) Elder Creek Elementary School

"b. 'Receiving schools' -- those schools with small minority group populations to which attendance areas of sending schools were reassigned (19 schools)."

Project Aspiration was evaluated using a sampling report approach and a description of the first year's evaluation appears in the 1966-67 ESEA, Title I, evaluation report titled Evaluation of ESEA Programs and Services for the Educationally Disadvantaged, August 1, 1967. Following is a summary of the results contained in that report:

A. Academic Results

"The integrated project pupils were matched with non-integrated project pupils in the same sending schools from which they were transferred. One year later, the integrated project pupils scored at higher levels on all the tests employed and made larger gains in all areas except the non-language ability subtest. However, none of the differences noted were found to be statistically significant."

B. Pupil attitudes

Intergrated pupils were reported by their teachers as having shown improvement in their attitudes toward school, their interest in school was reported to have improved, and their self-image was also higher at the end than at the beginning of the 1966-67 school year.

During the same period of time, a study was conducted by Mrs. Margaret M. Oakden, who had been a teacher at American Legion Elementary School, as a portion of her master's degree program at Sacramento State College. Mrs. Oakden's second grade class at American Legion Elementary School had consisted of 32 pupils and at the close of the 1966-67 school year 24 of these were still enrolled within the elementary schools of the district. Mrs. Oakden's master's thesis was concerned with a follow-up study of these pupils. She found that"(1) pupil growth in reading under Project Aspiration exceeded the previous rate of growth; (2) pupil attendance improved under Project Aspiration; and (3) pupil interest and attitudes as judged by parents and teachers improved under Project Aspiration."

Project Aspiration - 1967-68

During the 1967-68 school year, pupils reassigned during the preceding year continued in attendance in the receiving schools. In addition, all the pupils at Argonaut Elementary School were reassigned to receiving schools and the school was closed as an elementary school. Following is a summary of the findings from the 1967-68 school year as reported in the ESEA, Title I, evaluation report under the title ESEA Programs and Services for the Educationally Disadvantaged, August, 1968.

A. Academic Results

"The integrated project pupils were matched with non-integrated project pupils in the same sending schools from which they were

transferred. Two years later the integrated project pupils scored at higher levels on all tests employed and made larger gains in all areas. The differences in gains for fifth and sixth grade pupils were found to be statistically significant in language ability and arithmetic achievement (Table I) and approached statistical significance in total ability, reading achievement, and language achievement.

"These findings are far more positive and conclusive than those reported in 1967 after one year of integration."

B. Pupil Attitudes

Again positive results were noted by the teachers in pupil attitudes toward school and toward themselves.

C. Parental Opinions

Positive results concerning the effect of Project Aspiration on children were again obtained in a questionnaire which was administered through parents of the intergrated pupils.

D. Effect on Resident Pupils (Regular Pupils of the Receiving Schools)

The majority of teachers responding to a questionnaire concerning the effect of Project Aspiration on resident pupils reported no adverse effects on the resident pupils (Chart 1). In addition, 38% of those responding noted an improvement in the attitude of resident pupils toward other pupils and 34% reported an improvement in the adaptability of resident pupils. About one-fifth of the responding teachers indicated some negative effects on the general discipline in the receiving schools. A two-year comparison of the scores in reading for both intergrated and resident pupils indicated no adverse effects of Project Aspiration upon resident pupils.

Project Aspiration - 1968-69

Project Aspiration was further expanded in September of 1968 with the reassignment of the kindergarten and primary levels (grades 1-3) pupils from the Washington Elementary School to other schools within the school district. A large majority of the pupils added to Project Aspiration during the third year were white of Spanish Surname. The ESEA, Title I, evaluation report titled ESEA Programs and Services for the Educationally Disadvantaged, August, 1969, contains an evaluation of the results of the third year of Project Aspiration. The following summary is quoted from that report:

"A. In terms of the matched pair groups, the programs and services provided under Project Aspiration were effective in promoting greater pupil gains for the integrated project pupils than those realized by the non-integrated project pupils in reading, arithmetic, and language achievement, and in language ability. The non-integrated project pupils realized greater gains in non-language and total ability.

5

TABLE I

A COMPARISON OF THE DIFFERENCES IN PRE AND POST ABILITY AND ACHIEVEMENT TEST SCORES BETWEEN INTEGRATED PROJECT PUPILS (GROUP A) AND THEIR MATCHED PAIRS OF NON-INTEGRATED PROJECT PUPILS (GROUP MA) FIFTH AND SIXTH GRADE PUPILS

PRE-TEST: MAY, 1966 POST-TEST: MAY, 1968

A. ABILITY TEST SCORES
(CALIFORNIA TEST OF MENTAL MATURITY)

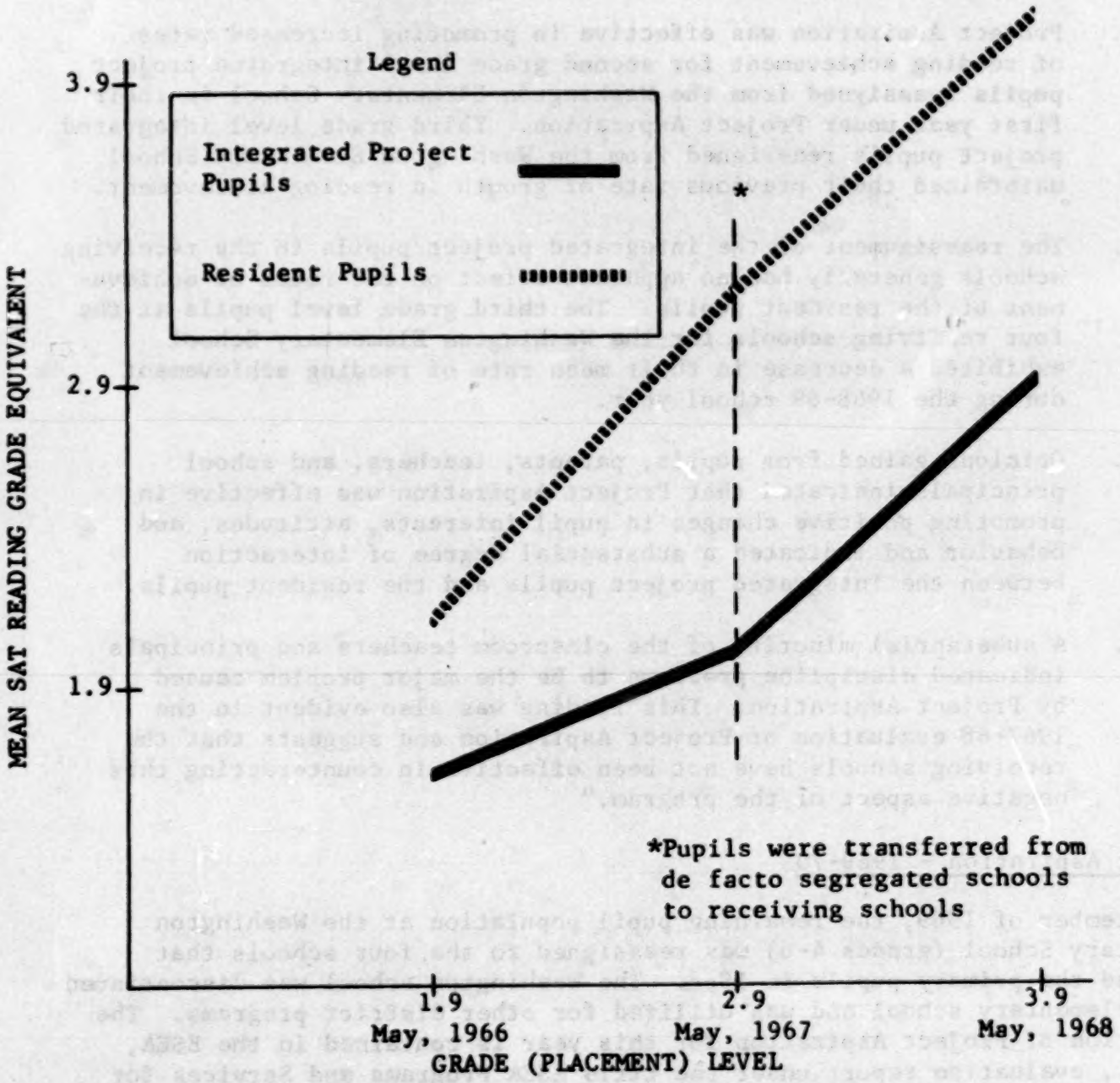
	Language		Non-Language		Total Ability	
	Group A	Group MA	Group A	Group MA	Group A	Group MA
Number of Matched Pairs	22		22		22	
Pre-Test: Mean I.Q. Score	100.64	106.59	103.55	97.09	101.95	101.86
Post-Test: Mean I.Q. Score	100.81	97.32	107.36	100.00	104.00	98.64
Gains in Mean	+0.17	-9.27	+3.81	+2.91	+2.05	-3.22
Differences in Gains (A - MA)	+9.44		+0.90		+5.27	
$\sum D$	+208		+20		+116	
$\bar{D}$	+9.45		+0.91		+5.27	
S_D	14.00		19.70		12.99	
$S_{\bar{D}}$	3.06		4.30		2.83	
t-ratio	+3.095		+0.212		+1.862	
Level of Significance	.01		N.S.		.10	

B. ACHIEVEMENT TEST SCORES
(CALIFORNIA ACHIEVEMENT TEST)

	Reading		Arithmetic		Language	
	Group A	Group MA	Group A	Group MA	Group A	Group MA
Number of Matched Pairs	23		23		22	
Pre-Test: Mean G.E. Score	4.09	4.06	4.27	4.33	4.32	4.15
Post-Test: Mean G.E. Score	5.80	5.40	5.99	5.67	5.80	5.35
Gains in Mean G.E. Score	+1.71	+1.34	+1.72	+1.34	+1.48	+1.20
Differences in Gains (A - MA)	+0.37		+0.38		+0.28	
$\sum D$	+8.3		+8.4		+6.2	
$\bar{D}$	+0.36		+0.37		+0.28	
S_D	0.94		0.77		0.89	
$S_{\bar{D}}$	0.20		0.16		0.19	
t-ratio	+1.800		+2.313		+1.473	
Level of Significance	.10		.05		.2	

CHART 1

A COMPARISON OF PUPIL PROGRESS IN READING FOR INTEGRATED PROJECT PUPILS AND RESIDENT PUPILS DURING TWO YEARS PRIOR TO INTEGRATION AND ONE YEAR AFTER INTEGRATION
STANFORD READING TEST 1966-68



SUMMARY OF MEAN SAT GRADE EQUIVALENT SCORES

Integrated Project Pupils N = 35	1.6	2.0	2.9
Resident Pupils N = 221	2.1	3.2	4.1

"B. Project Aspiration was generally effective in promoting increased rates of achievement in reading during the 1968-69 school year for third and fourth grade level integrated project pupils in their second or third year under Project Aspiration. Third grade integrated project pupils reassigned from the Argonaut Elementary School exhibited a decrease in their rate of reading achievement in their second year under Project Aspiration.

"C. Project Aspiration was effective in promoting increased rates of reading achievement for second grade level integrated project pupils reassigned from the Washington Elementary School in their first year under Project Aspiration. Third grade level integrated project pupils reassigned from the Washington Elementary School maintained their previous rate of growth in reading achievement.

"D. The reassignment of the integrated project pupils to the receiving schools generally had no apparent effect on the rates of achievement of the resident pupils. The third grade level pupils at the four receiving schools for the Washington Elementary School exhibited a decrease in their mean rate of reading achievement during the 1968-69 school year.

"E. Opinions gained from pupils, parents, teachers, and school principals indicated that Project Aspiration was effective in promoting positive changes in pupil interests, attitudes, and behavior and indicated a substantial degree of interaction between the integrated project pupils and the resident pupils.

"F. A substantial minority of the classroom teachers and principals indicated discipline problems to be the major problem caused by Project Aspiration. This finding was also evident in the 1967-68 evaluation of Project Aspiration and suggests that the receiving schools have not been effective in counteracting this negative aspect of the program."

Project Aspiration - 1969-70

In September of 1969, the remaining pupil population at the Washington Elementary School (grades 4-6) was reassigned to the four schools that received the primary pupils in 1968. The Washington school was discontinued as an elementary school and was utilized for other district programs. The evaluation of Project Aspiration for this year is contained in the ESEA, Title I, evaluation report under the title ESEA Programs and Services for the Educationally Disadvantaged, August, 1970. The following summary is quoted from that report:

"A. Project Aspiration was effective in promoting improved pupil performance in reading achievement at grade (placement) levels 2-5 and in arithmetic achievement at grade (placement) levels 3-5. Pupil performance at these levels, as well as that of kindergarten pupils, exceeded anticipated performance as stated in the performance objectives established for the program, and while these pupils may not be achieving at 'grade level' at all levels, the increased percentile rankings indicate that they are 'catching up' with the norm population.

"B. Pupil performance at grade (placement) level four generally exceeded that at other levels. This may be a characteristic of the test employed, the publisher's norms, the program and/or the pupil population.

"C. Pupil performance in specific skill areas varied amoung the receiving schools suggesting perhaps different areas of emphasis and/or different strategies among the receiving schools.

"D. The resource teacher and English as a second language programs appeared to be effective for those pupils they served.

"E. Project Aspiration appeared to have little or no effect on pupil interests, attitudes and attendance.

"F. Project Aspiration was effective in promoting a high level of positive interaction between the resident and integrated project pupils.

"G. The auxiliary services accompaning Project Aspiration were helpful and of support to the program, but the level of such support services was considered to be inadequate. The resource reading teacher program was a very effective auxiliary program. The project pupils served by the resource reading teachers generally made significantly greater progress in reading than did other project pupils despite the fact that they were selected for such service because they were having the most difficulties in reading.

"H. Both parents and teachers generally expressed favorable views about Project Aspiration. A noticeable minority of the teachers did suggest, however, that the project pupils did need more of the auxiliary services normally provided in programs of compensatory education."

While discipline in receiving schools was listed by a substantial minority of teachers as a problem during the 1968-69 school year, only 14 staff members listed discipline as a problem when the 1969-70 evaluation was conducted. These represent 4.9% of the total of 286 teachers who responded to a questionnaire concerning the operation of the project in the receiving schools.

Project Aspiration - 1970-71

A number of basic changes were made in 1970-71 in the program at the Project Aspiration schools. In general these changes included the following:

"(1) an increased concentration of resource teachers in the Project Aspiration schools, (2) the addition of paid teacher aides, (3) the addition of teacher aides from Sacramento State College (college students), (4) an increase in the number of NYC aides (high school students), (5) the provision of Harper and Row programmed tutoring to many pupils in Project Aspiration Schools, (6) the movement of additional reading specialists to project schools, (7) an increase in counseling time for Project Aspiration schools, and (8) the addition of an item analysis of the California Achievement Test for all target pupils in Project Aspiration schools."

The ESEA, Title I, evaluation report for 1970-71 contains an evaluation of Project Aspiration. The report was issued under the title Focus on Reading and Mathematics, 1970-71, July, 1971. The following conclusions are reported from that publication:

"A. Project Aspiration was effective in promoting improved pupil performance in reading achievement at placement (grade) levels 1-6 and in arithmetic achievement at placement (grade) levels 2-6. Pupil performance at these levels, as well as that of kindergarten pupils, exceeded anticipated performance as stated in the performance objectives established for the program, and while these pupils may not be achieving at 'grade level' at all levels, the increased percentile rankings indicate that they are 'catching up' with the norm population, as measured by the California Achievement Tests.

"B. Pupil performance at placement (grade) level four generally exceeded that at other levels. This may be a characteristic of the test employed.

"C. Pupil performance in specific skill areas varied among the various attendance areas.

"D. The resource teacher program and the English as a second language program appeared to be effective for those pupils served. Preliminary results of a study comparing the results of instruction by resource teachers using individual contract methods with small group instruction suggest gains for such instruction, though none of these gains were statistically significant.

"E. The concentration of compensatory programs had a positive impact on pupil interests, attitudes, and attendance.

"F. Pre and post comparisions by classroom teachers showed gains in 'respect for authority,' 'participation in activities,' and 'interaction with other pupils' for integrated project pupils.

"G. The certificated staff rated the auxiliary services offered to Project Aspiration schools as 'good.'

"H. Black integrated pupils achieved significantly higher gains in several placement levels in reading and in arithmetic, as measured by the California Achievement Test, than did non-integrated Black pupils taught in saturated schools.

"I. Integrated pupils of Spanish Surname from the Washington attendance area exceeded the performance objectives set for mathematics in placement levels 2-6 and in reading in placement levels 2-5."

The Effects of Project Aspiration in Raising Achievement Levels for Ethnic Minority Pupils

Two of the conclusions contained in the 1970-71 ESEA, Title I, evaluation report (conclusions H and I) concerned the effect of the project on Black

integrated pupils and upon Spanish Surname pupils. The conclusions were based upon two comparisons made to determine the effects of integrating minority group pupils under Project Aspiration. One study compared the achievement of Black pupils integrated into Project Aspiration receiving schools with the achievement of Black pupils within the compensatory education program who were not integrated.[1] The second study compared the achievement of minority pupils of Spanish Surname in the Washington residence area during the 1970-71 school year to project goals.

"A. Comparison of Achievement of Integrated and Non-Integrated Black Pupils

The academic achievement of Black pupils in placement levels 2-6 were compared using scores in the spring post-test of the California Achievement Test. Kindergarten pupils and placement level one pupils were not included in the study because of the unavilability of a meaningful pre-test score for a baseline. Achievement was compared both in reading and in arithmetic.[2]

1. Reading Achievement

Non-integrated and integrated pupils in placement levels 2-6 were compared using scores on the California Achievement Test, Reading Section, administered in May of 1971 as the dependent variable and scores on the same test given in the fall of 1970 as a covariant in a series of analyses of covariance. Table XXVI reports the results of these analyses. The following observations may be made from these data:

a. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher level which was statistically significant at the .01 level in reading in placement (grade) level four.

b. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher level which was statistically significant at the .10 level in reading in placement levels 3 and 6.

c. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher

---

[1]A summary of both ethnic distribution and family income for the schools used in this comparison is contained in the appendix (Table II).

[2]Raw scores for the groups used in this comparison are included in the appendix (Table IV).

PROJECT ASPIRATION RECEIVING SCHOOLS--TABLE XXVI

ANALYSIS OF COVARIANCE UTILIZING FALL, 1970, PRE-TEST AND SPRING, 1971, POST-TEST SCORES ON THE CALIFORNIA ACHIEVEMENT TEST AS COVARIANT AND DEPENDENT VARIABLE, RESPECTIVELY, COMPARING THE READING ACHIEVEMENT OF BLACK NON-INTEGRATED WITH BLACK INTEGRATED* PROJECT PUPILS

A. Placement Level Two (Lower Primary CAT)

Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	76.589	1	76.589	2.44	.20 (integrated)	.69
Error	2197.133	70	31.387			

B. Placement Level Three (Upper Primary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	419.636	1	419.636	3.884	.10 (integrated)	.69
Error	6158.217	57	108.038			

C. Placement Level Four (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	1864.329	1	1864.329	8.005	.01 (integrated)	.63
Error	10247.358	44	232.894			

D. Placement Level Five (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	144.379	1	144.379	1.263	NS	.83
Error	5484.104	48	114.252			

E. Placement Level Six (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	302.393	1	302.393	3.593	.10 (integrated)	.68
Error	3534.571	42	84.156			

*Groups for this study were made up of (1) experimental--all integrated Black pupils from the attendance areas of saturated schools A, B, and C; and (2) control--Black pupils within the attendance area of these same schools who attended these schools (non-integrated pupils) and who lived within residence areas most like those of the integrated pupils in regard to ethnic make-up and economic level of parents.

PROJECT ASPIRATION RECEIVING SCHOOLS--TABLE XXVII

UNADJUSTED MEANS OF THE CALIFORNIA ACHIEVEMENT TEST, READING SECTION, FOR EXPERIMENTAL (INTEGRATED) AND CONTROL (NON-INTEGRATED) BLACK PUPILS FOR THE SPRING, 1971, POST-TEST BY PLACEMENT LEVELS

Group	Level 2		Level 3		Level 4		Level 5		Level 6	
	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Experimental (Integrated Black Pupils)	19	78.63	16	82.13	12	79.25	12	76.00	20	94.7
Control (Non-integrated Black Pupils)	54	76.91	44	69.59	35	62.54	39	81.21	25	88.8

level which was statistically significant at the .20 level in reading in placement level two.

d. There was no statistically significant difference in placement level five between the performance of integrated and non-integrated Black pupils on the California Achievement Test, Reading Section, elementary level.

e. Black integrated pupils outscored non-integrated Black pupils in the raw mean score for the California Achievement Tests in placement levels 2, 3, 4, and 6 (Table XXVII).

f. In placement level five, where no statistically significant difference was found, non-integrated Black pupils outscored integrated Black pupils on the California Achievement Test, Reading Section, elementary level.

g. The correlations between the pre and post-tests in each placement level exceeded .60 (Pearson's "r").

2. Arithmetic Achievement

Non-integrated and integrated pupils in placement levels 2-6 were compared using scores on the California Achievement Test, Arithmetic Section, administered in May of 1971 as the dependent variable and scores on the same test given in the fall of 1970 as a covariant in a series of analyses of covariance. Table XXVIII reports the results of these analyses. The following observations may be made from these data:

a. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher level which was statistically significant at the .001 level in arithmetic in placement levels four and six.

b. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher level which was statistically significant at the .10 level in placement levels three and five.

c. Black integrated pupils from the same residence area in which a saturated program was offered for non-integrated Black pupils achieved at a higher level which was statistically significant at the .20 level in placement level two.

PROJECT ASPIRATION RECEIVING SCHOOLS--TABLE XXVIII

ANALYSIS OF COVARIANCE UTILIZING FALL, 1970, PRE-TEST AND SPRING, 1971, POST-TEST SCORES ON THE CALIFORNIA ACHIEVEMENT TEST AS COVARIANT AND DEPENDENT VARIABLE, RESPECTIVELY, COMPARING THE ARITHMETIC ACHIEVEMENT OF BLACK NON-INTEGRATED WITH BLACK INTEGRATED* PROJECT PUPILS

A. Placement Level Two (Lower Primary CAT)

Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	151.594	1	151.594	1.836	.20 (integrated)	.65
Error	5448.322	66	82.550			

B. Placement Level Three (Upper Primary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	2470.605	1	2470.605	3.845	.10 (integrated)	.65
Error	25054.859	39	642.432			

C. Placement Level Four (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	5180.177	1	5180.177	27.794	.001 (integrated)	.40
Error	8759.508	47	186.372	186.36		

D. Placement Level Five (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	257.109	1	257.109	2.947	.10 (integrated)	.73
Error	3747.777	43	87.158			

E. Placement Level Six (Elementary CAT)

Non-integrated Source of Variation	Sum of Squares	df	Mean Squares	F	Significance	Correlation Pre and Post-Test
Non-integrated versus integrated Black pupils	1636.935	1	1636.935	19.117	.001 (integrated)	.50
Error	3596.185	42	85.623			

*Groups for this study were made up of (1) experimental--all integrated Black pupils from the attendance areas of saturated schools A, B, and C; and (2) control--Black pupils within the attendance area of these same schools who attended these schools (non-integrated pupils) and who lived within residence areas most like those of the integrated pupils in regard to ethnic make-up and economic level of parents.

PROJECT ASPIRATION RECEIVING SCHOOLS--TABLE XXIX

UNADJUSTED MEANS OF THE CALIFORNIA ACHIEVEMENT TEST, ARITHMETIC SECTION, FOR EXPERIMENTAL (INTEGRATED) AND CONTROL (NON-INTEGRATED) BLACK PUPILS FOR THE SPRING, 1971, POST-TEST BY PLACEMENT LEVEL

Group	Level 2		Level 3		Level 4		Level 5		Level 6	
	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Experimental (Integrated Black Pupils)	19	77.38	16	166.56	12	66.83	11	58.91	19	75.74
Control (Non-integrated Black Pupils)	50	69.54	26	136.19	38	45.42	35	56.09	26	62.46

d. Black integrated pupils outscored non-integrated Black pupils in the mean raw score for the California Achievement Tests in all placement levels (2-6) on the Arithmetic Section (Table XXIX).

e. The correlations between the pre and post-tests exceeded .50 (Pearson's "r") in all cases except for placement level four, where the correlation was .40.

"B. Comparison of Achievement of Pupils of Spanish Surname Between the 1969-70 and the 1970-71 School Years

Median gain scores were isolated for pupils of Spanish Surname from Area D (Washington School) for gains achieved in reading and arithmetic between the pre-test (CAT) given in October of 1970 and the post-test (CAT) given in May of 1971. These gains are reported in Charts 4 and 5. The following observations may be made concerning these data:

1. Reading Achievement

   a. Pupils of Spanish Surname from Area D achieved gains in reading equivalent to or greater than the months of instruction between the pre and post-tests in placement levels 2-5. In placement level six the gain was 0.5 months short of reaching one months gain for each month of instruction.

   b. The highest gain was achieved in placement level four (11.0 months) and the lowest in placement level six (6.5 months).

2. Arithmetic Achievement

   a. Pupils of Spanish Surname from Area D achieved gains in arithmetic which exceeded both the actual months of instruction and the anticipated project goal.

   b. The highest gain was achieved in placement level four (16.0 months) and the lowest in placement level two and six (8.0 months)."

CONCLUSION

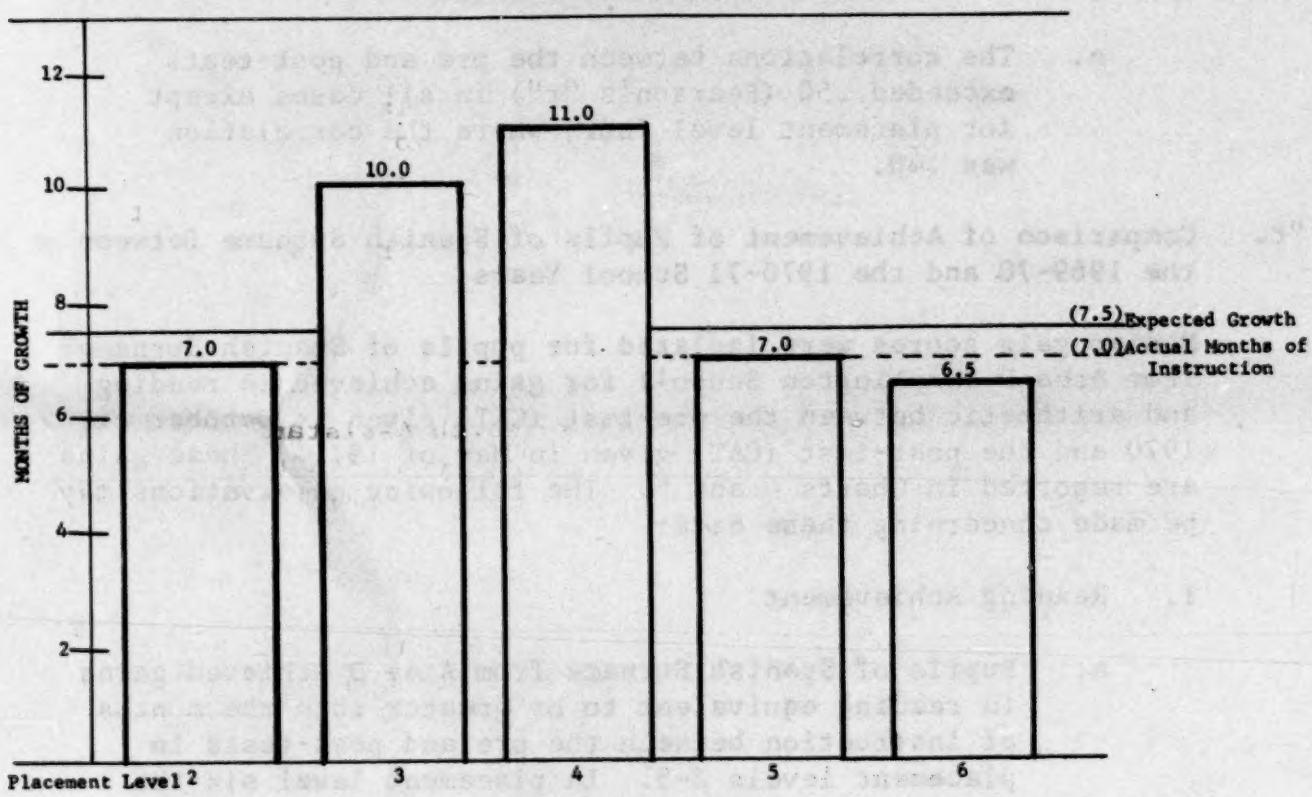
Following the successful reassignment of pupils from a junior high school in 1964 to create a better ethnic balance, the Board of Education in the Sacramento City Unified School District adopted a plan for the alleviation or the elimination of the adverse effects of de facto segregation in the elementary segment. This plan, known as Project Aspiration, was inaugerated during the 1966-67 school year under funding from the Elementary and Secondary Education Act, Title I. Evaluation of the effects of this project has continued to the present day with the following findings.

al

15

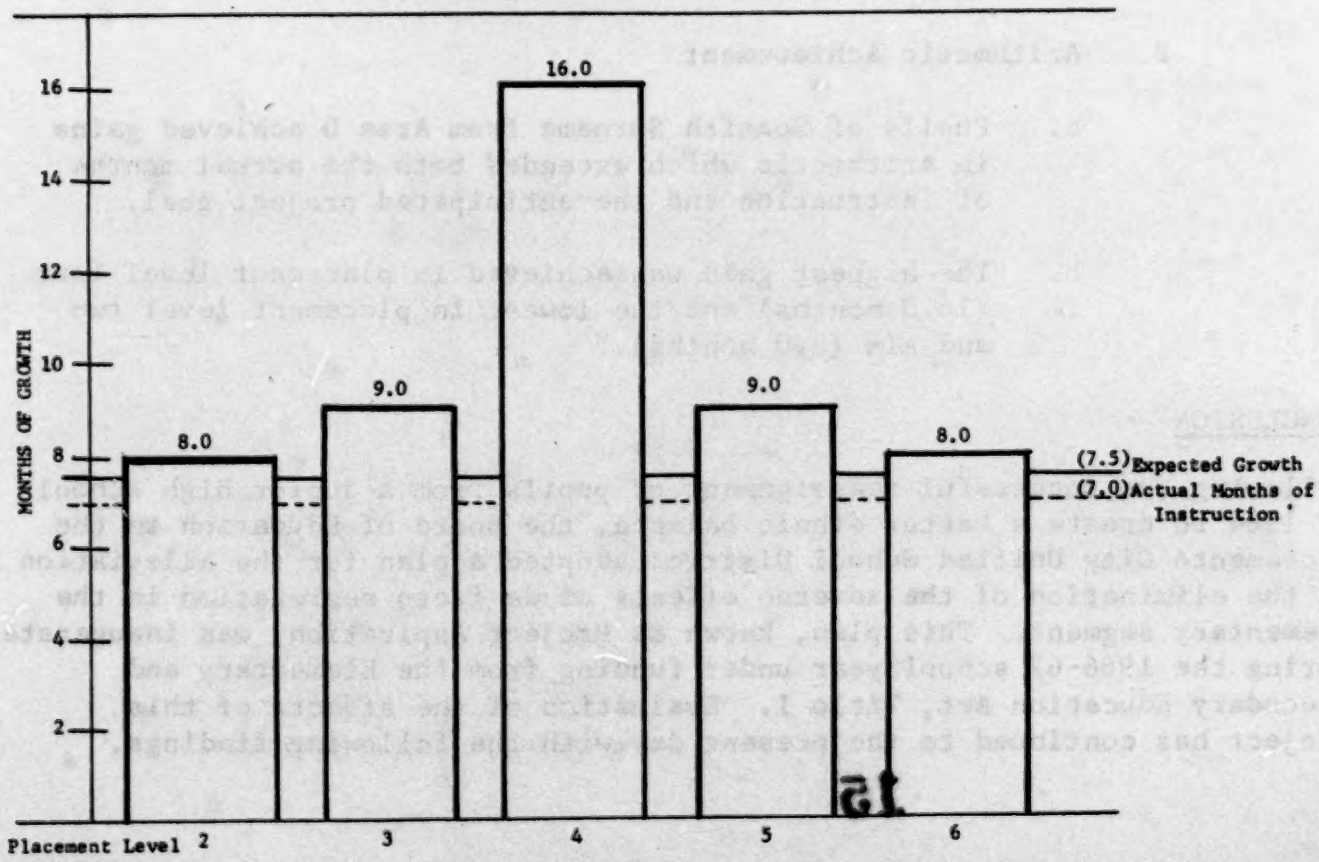
PROJECT ASPIRATION RECEIVING SCHOOLS--CHART 4

MEDIAN GAINS IN MONTHS FOR PUPILS OF SPANISH SURNAME IN AREA D
BETWEEN THE PRE-TEST AND THE POST-TEST
ON THE CALIFORNIA ACHIEVEMENT TEST
READING SECTION



PROJECT ASPIRATION RECEIVING SCHOOLS--CHART 5

MEDIAN GAINS IN MONTHS FOR PUPILS OF SPANISH SURNAME IN AREA D
BETWEEN THE PRE-TEST AND THE POST-TEST
ON THE CALIFORNIA ACHIEVEMENT TEST
ARITHMETIC SECTION



A. Minority pupils reassigned to integrated schools tend to perform better academically than do their peers in de facto segregated schools.

B. Resident pupils in schools which receive reassigned minority pupils are not adversely affected in their academic pursuits.

C. The number of certificated personnel who listed discipline as a major problem in Project Aspiration receiving schools dropped each year from approximately one-fifth of those responding to a questionnaire in 1967-68 to less than one in twenty of those responding in 1969-70.

D. Parents of the pupils involved and staff members indicated a preponderance of positive effects resulting from the reassignment of minority pupils.

Edward B. Morrison
Research Assistant
Educational Evaluation and
Quality Control Department

James A. Stivers
Director
Educational Evaluation and
Quality Control Department

Approved:
Donald E. Hall
Assistant Superintendent
Research and Development
Services Office

EBM:jg

APPENDIX

TABLE III

ETHNIC COMPOSITION AND MEDIAN FAMILY INCOME
FOR SENDING AND RECEIVING* SCHOOLS REPORTED IN THE 1970-71 STUDY
OF INTEGRATED BLACK VERSUS NON-INTEGRATED BLACK PUPILS

Name of School	Ethnic Composition												Median Family Income**
Sending (Non-integrated Schools)	Spanish Surname		Other White		Negro or Black		Oriental		American Indian		Other Non-White		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
CAMELLIA	36	10.7	13	3.9	283	84.5					3	0.9	$ 5,900.00
DONNER	53	13.7	73	18.8	254	65.5	4	1.0			4	1.0	$ 4,888.89
Receiving (Integrated Schools)													
BOWLING GREEN	25	4.3	471	81.3	53	9.2	27	4.7			3	0.5	$12,083.00
CLAYTON B. WIRE	44	11.9	281	76.2	26	7.0	14	3.8			4	1.1	$ 7,900.00
PARKWAY	18	2.9	578	92.2	23	3.7	6	1.0			1	0.2	$10,083.00
PETER BURNETT	55	9.4	459	78.5	49	8.4	9	1.5			5	1.2	$ 6,833.33
TAHOE	44	10.8	295	72.7	53	13.1	11	2.7			3	0.7	$ 8,500.00

*Receiving schools include those pupils reassigned from the sending areas.

**Data source: "Regional and County Projection--Median House-hold Incomes, Part II, Sacramento Regional Area" (Palo Alto: Optimum Systems Incorporated, June 1970 (duplicated).

TABLE IV

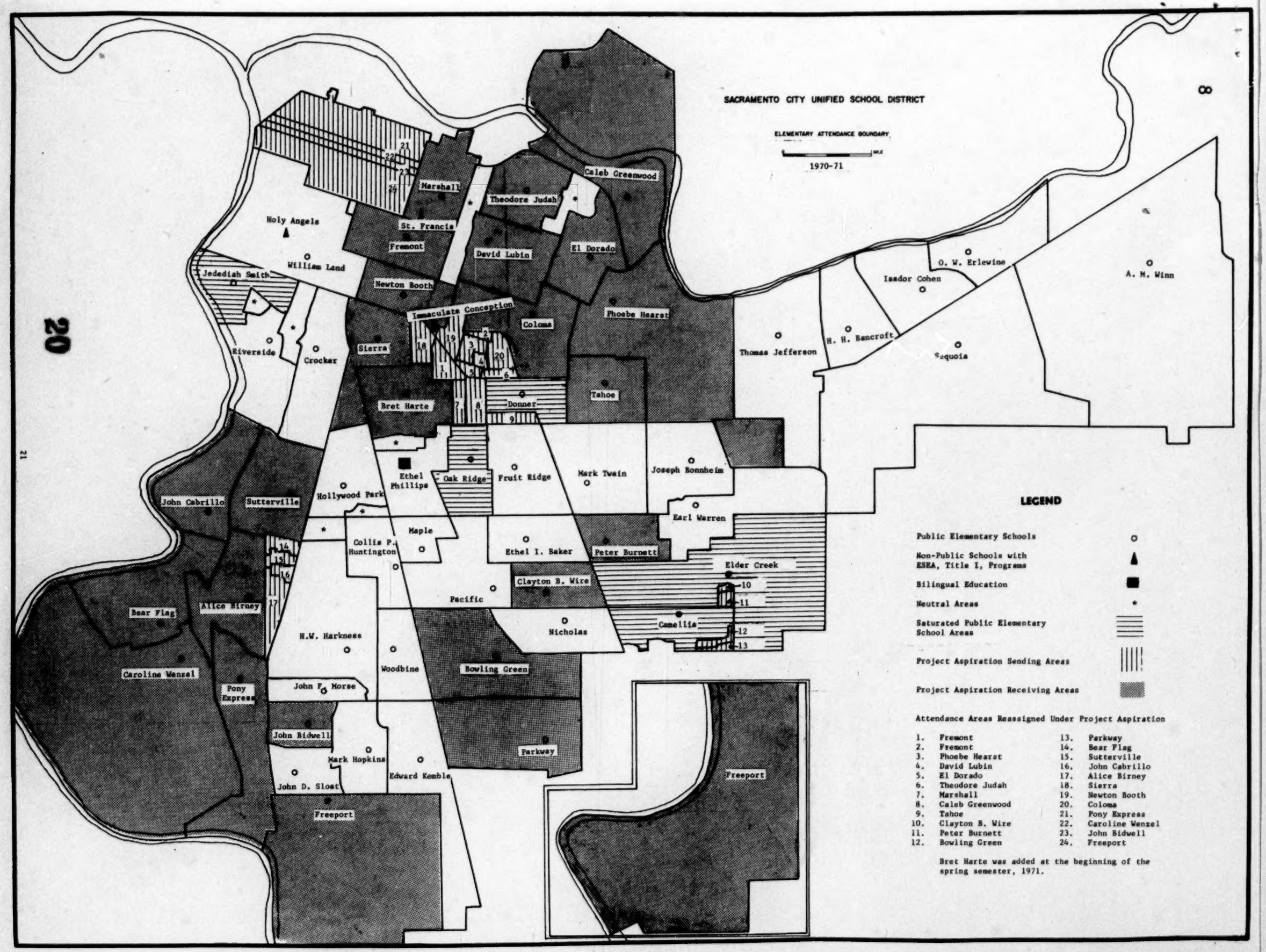
RAW SCORES IN READING AND ARITHMETIC FOR INTEGRATED (EXPERIMENTAL) AND NON-INTEGRATED (CONTROL) BLACK PUPILS
IN GRADES 2-6 ON THE CALIFORNIA ACHIEVEMENT TEST ADMINISTERED IN OCTOBER, 1970 (PRE-TEST), AND MAY, 1971 (POST-TEST)

| EXPERIMENTAL GROUP | | |

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ELEMENTARY ATTENDANCE BOUNDARY

1970-71



Attendance Areas Reassigned Under Project Aspiration

1.	Fremont	13.	Parkway
2.	Fremont	14.	Bear Flag
3.	Phoebe Hearst	15.	Sutterville
4.	David Lubin	16.	John Cabrillo
5.	El Dorado	17.	Alice Birney
6.	Theodore Judah	18.	Sierra
7.	Marshall	19.	Newton Booth
8.	Caleb Greenwood	20.	Coloma
9.	Tahoe	21.	Pony Express
10.	Clayton B. Wire	22.	Caroline Wenzel
11.	Peter Burnett	23.	John Bidwell
12.	Bowling Green	24.	Freeport

Bret Harte was added at the beginning of the spring semester, 1971.